

To: Harris County Precinct Two Commissioner Adrian Garcia
From: Katie Short, Director; Amy Rose, Senior Analyst
CC: Mike Lykes, Kris Banks, Mohammed Jamal with Precinct Two; Dr. Sherri Onyiego, Gwen Sims with Harris County Public Health; Josh Stuckey, Harris County Budget Management Department
Date: February 9, 2021
Re: **Monthly Memo on COVID-19 Vaccine Dose Distribution, January 2021**

EXECUTIVE SUMMARY

In January 2021, Precinct Two requested the Analyst's Office produce a monthly memo regarding the distribution of COVID-19 vaccinations in Harris County. This is the first memo of a standing monthly memo the Analyst's Office will produce as the vaccine distribution continues to evolve at the federal, state, and local levels.

This memo provides an overview of the COVID-19 vaccine dose distribution in Harris County from the start of the distribution on December 14, 2020 through January 31, 2021. This memo includes data for vaccine doses distributed by all providers in Harris County. Key findings from the data in this memo include:¹

- **As of January 31, 2021, all providers in Harris County administered a cumulative 354,469 vaccine doses; 351,885 of those doses were administered to residents living in Harris County.**
- For all individuals who received a vaccine dose from a Harris County provider, **10% (28,557) are 80 years old or older; 32% (91,285) are ages 65-79; 22% (63,570) are ages 50-64; and 36% (105,845) ages 16-49.**
- **Zip codes 77507 and 77010 have the fewest total numbers of vaccine doses administered to residents (41 and 104, respectively).^{2,3}**
- **Zip codes 77024 and 77030 the greatest numbers of vaccine doses administered to residents (13,146 and 16,811, respectively).**
- **The median income of the ten Harris County zip codes with the fewest numbers of vaccine doses administered to residents is \$49,591. The median income of the ten Harris County zip codes with the greatest numbers of vaccine doses administered to residents is \$103,088.**

¹ IMPORTANT NOTE: Not all data sums to totals reported. This is due to poor and inconsistent data reporting by providers, and because patients have not been required to disclose all demographic data. DSHS reports it is actively conducting county and provider-level analyses to identify if certain providers or areas are underreporting more than others for targeted data entry funding and training.

² Zip code 77507 encompasses the Bayport Industrial District, a large commercial real-estate development area of Pasadena. Zip code 77010 encompasses a small (0.12 square miles) section of downtown Houston, including the Discovery Green recreational space.

³Significantly large numbers of residents who were administered a vaccine dose in zip codes 77024 and 77030 report living at the same address. HCPH suggests that this discrepancy may be caused by hospital staff entering the same address for employees to speed up the vaccination process.

BACKGROUND

In December 2020, two-dose vaccines from two producers, Moderna and Pfizer-BioNTech, were authorized for emergency use from the U.S. Food and Drug Administration. Two additional producers, Johnson and Johnson, and AstraZeneca, may each have a vaccine available for distribution in Spring 2021.

For the bulk of the vaccine doses coming to Harris County, Texas, the federal government distributes COVID-19 vaccine doses to the Texas Department of State Health Services (DSHS), which distributes vaccine doses to local providers in Harris County. Any facility, organization, or healthcare provider licensed to possess or administer vaccine or provide vaccination services is eligible to enroll as a designated provider. Providers include: emergency services; health centers (community, federally qualified, migrant, rural); hospitals; long-term care; medical clinic/doctor's office; pharmacy; public health/government; federal long-term care; and other.⁴

From December 2020 to January 2021 vaccine doses were made available for individuals in DSHS's Phase 1A (front-line health care workers and residents of long-term care facilities)⁵ and 1B (individuals ages 65+, and individuals ages 16+ with "at least one chronic medical condition that puts them at increased risk for severe illness from the virus that causes COVID-19").⁶ The combination of those two populations are estimated to total at least 1,600,000 people in Harris County (Phase 1A population: 300,000; Phase 1B population: 1,300,000).⁷

The data in this memo are from the Texas Department of State Health Services (DSHS)⁸ and reflect COVID-19 vaccine doses allocated and distributed in Harris County from the beginning of the vaccine rollout, December 14, 2020, through to January 31, 2021. Data includes doses allocated to and administered by all organization types in Harris County.

⁴ Department of State Health Services (DSHS) COVID-19 Vaccine Allocation Dashboard

⁵ Department of State Health Services (DSHS) COVID-19 Vaccine Allocation Phase 1 Definition

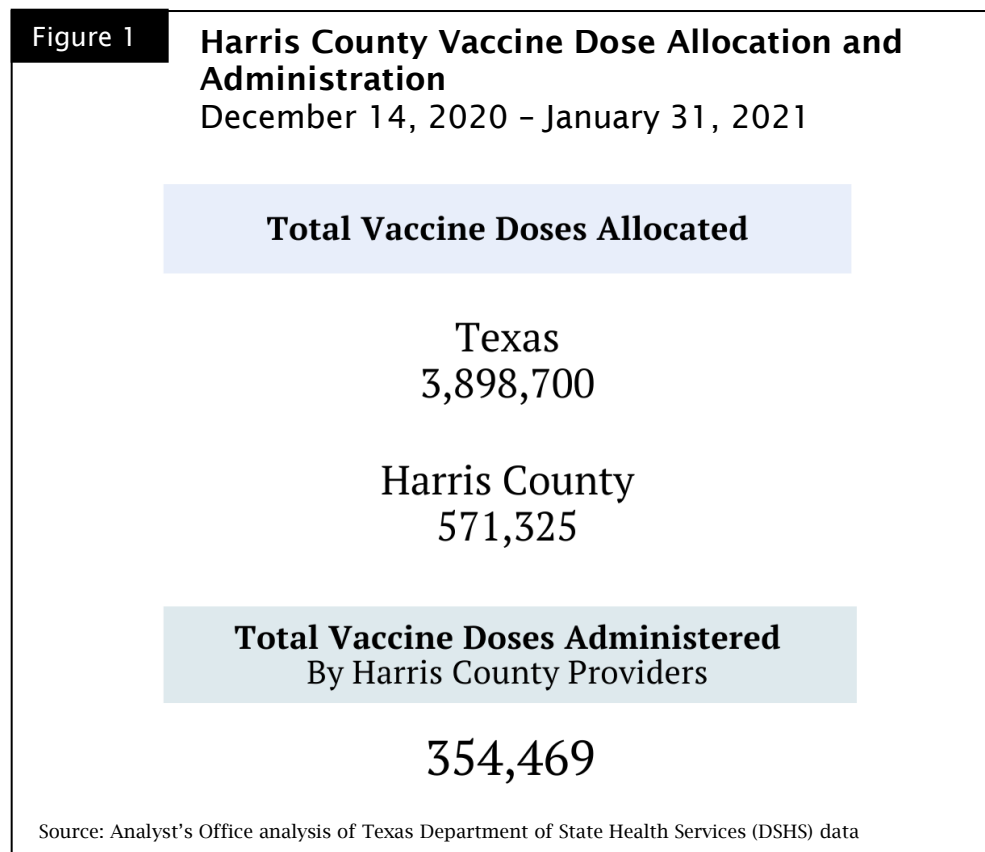
⁶ Department of State Health Services (DSHS) COVID-19 Vaccine Allocation Phase 1B Definition

⁷ Harris County Public Health Strategic Vaccination Dissemination Framework

⁸ DSHS's ImmTrac2 dashboard updates COVID-19 related data daily at 4pm. DSHS notes that there can be a 48 hour lag on this system. This report utilizes data downloaded from ImmTrac2 on Feb 2 (to account for data from December 14, 2020 through January 31, 2021), and data pulled from ImmTrac by Harris County Public Health Department. Due to access limitations and reporting inconsistencies, data from these sources do not sum.

TOTAL VACCINE DOSE ALLOCATION AND ADMINISTRATION

Figure 1 notes the total number of vaccine doses allocated to Harris County, and the total number of vaccine doses administered by providers in Harris County.



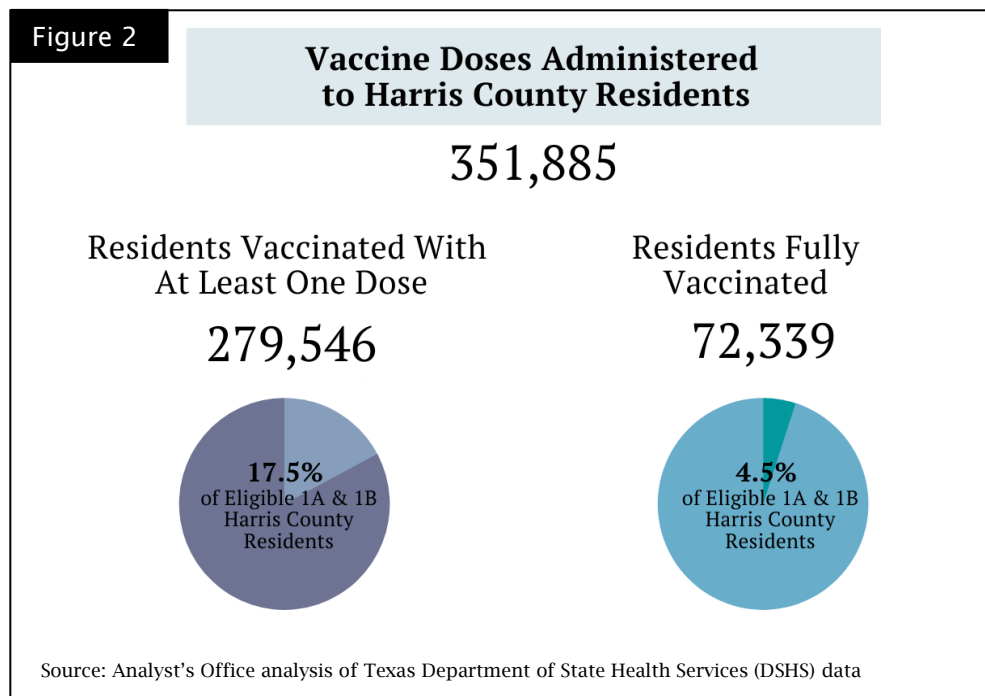
Between December 14, 2020 and January 31, 2021, the Centers for Disease Control and Prevention allocated a total of 3,898,700 million vaccine doses to the State of Texas. The Texas Department of State Health Services (DSHS) allocated **571,325 of those vaccine doses to providers in Harris County.**

Of those 571,325 vaccine doses, **354,469 doses were administered by providers in Harris County.**⁹

⁹ Figure represents vaccine doses administered to all individuals, not just residents of Harris County.

VACCINE DOSES ADMINISTERED TO RESIDENTS IN HARRIS COUNTY

Figure 2 notes the total number of vaccines doses allocated to residents in Harris County. In contrast, the total vaccine doses administered by Harris County providers reported in Figure 1 included doses for Harris County residents as well as individuals who report not being Harris County residents.



Harris County providers have administered **351,885 vaccine doses to individuals in Harris County.**

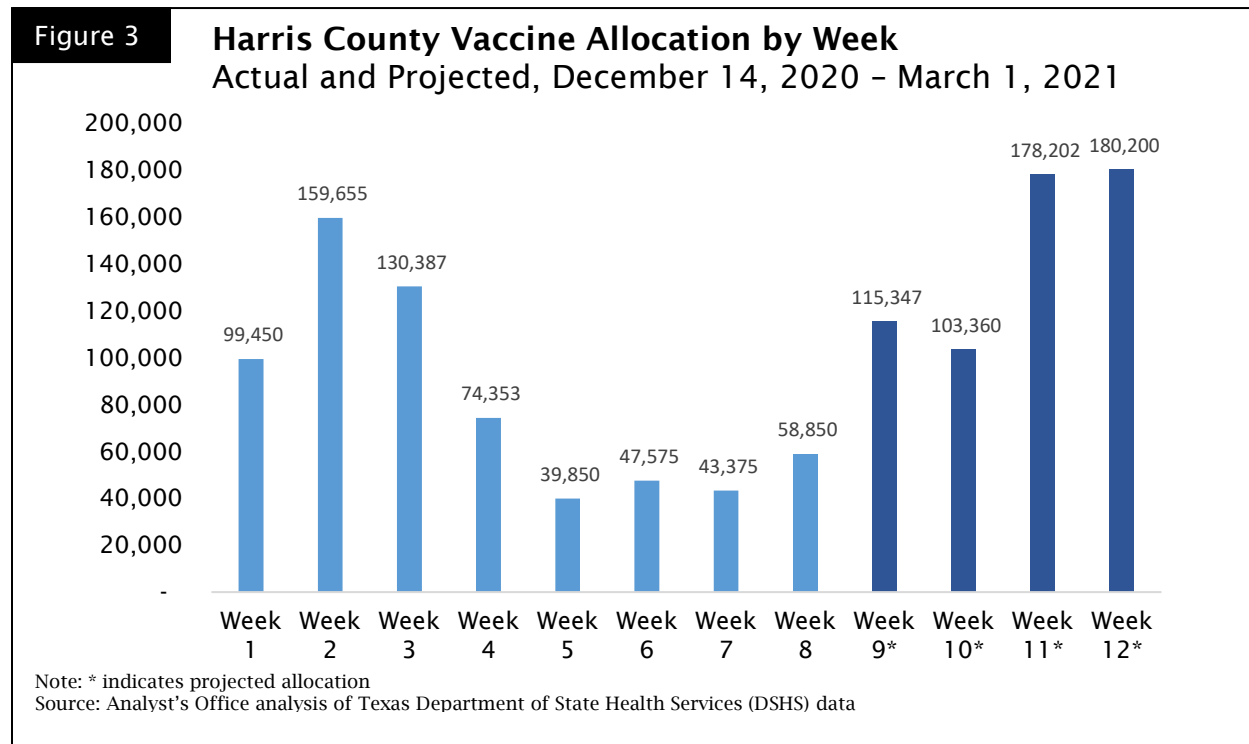
A total of 279,546 individuals living in Harris County have received at least one dose (17.5% of Harris County's eligible 1A & 1B population¹⁰, or 5.9% of Harris County's total population).

And 72,339 individuals in Harris County are fully vaccinated — meaning they have received both doses of either the Moderna or Pfizer vaccines (4.5% of Harris County's eligible 1A & 1B population; 1.5% of Harris County's total population).

¹⁰ Eligible individuals include individuals in DSHS's Phases 1A (front-line health care workers and residents of long-term care facilities) and 1B (individuals ages 65+, and individuals ages 16+ with "at least one chronic medical condition that puts them at increased risk for severe illness from the virus that causes COVID-19"). The combination of those two populations are estimated to be a total of at least 1.6M people in Harris County (Phase 1A population: 300K; Phase 1B population: 1.3M).

VACCINE DOSES ALLOCATED TO HARRIS COUNTY PROVIDERS

Figure 3 presents the actual total number (light blue bars on chart) of vaccine doses allocated to all providers in Harris County between December 14, 2020 (Week 1) and February 1, 2021 (Week 8), and the projected number (dark blue bars on chart) of allocations for February 8, 2021 (Week 9) through March 1, 2021 (Week 12).



The federal and State of Texas vaccine dose distribution strategies have shifted since early December 2020, accounting, in part, for the dramatic changes in the number of total doses distributed to providers in Harris County from week to week.

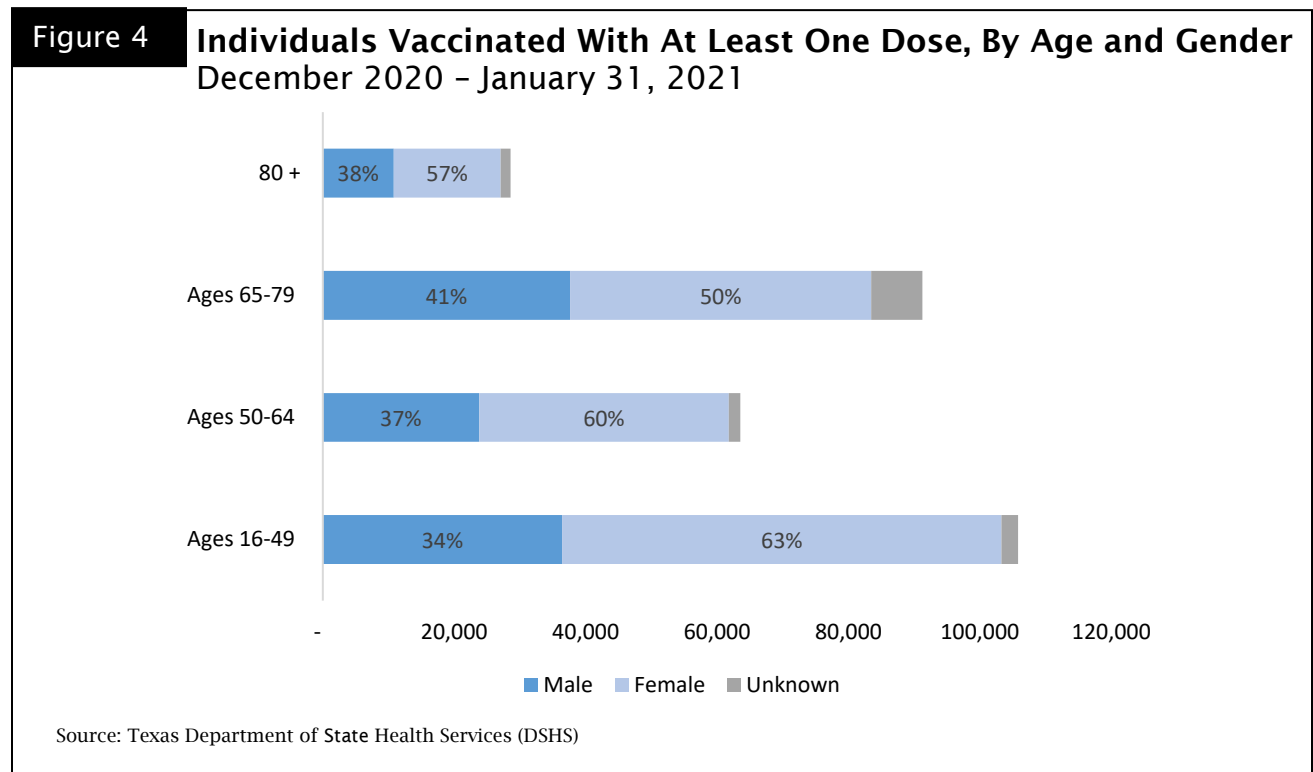
Prospective vaccine providers must apply for approval to distribute COVID-19 vaccines through the Texas Department of State Health Services (DSHS). Approved providers include the following organization types, as categorized by DSHS: emergency services; health centers (community, federally qualified, migrant, rural); hospitals; long-term care; medical clinic/doctor's office; pharmacy; public health/government; federal long-term care; and other.

Figure 3 presents the total number of vaccine doses allocated, actual and projected, to all approved providers in Harris County.¹¹ The projected vaccine dose allocations assume the **average historical rate of distribution by the federal government to the State of Texas and State of Texas to Harris County**. As of February 8, 2021, Harris County received a weekly average of 13.6% of the State's vaccine dose allocation.

¹¹ Figures do not match data presented on DSHS online COVID dashboard. The Texas vaccine allocations do not include the CDC's federal long-term care allocations that are allocated directly from the federal government to long-term care facilities (LTCFs). DSHS's public COVID-19 online dashboard does include those numbers for the public. The public dashboard shows the allocations by the intended shipment week, while this distribution data presents the allocations as they were allocated, as sent to the Analyst's Office by DSHS.

VACCINE DOSES ADMINISTERED TO INDIVIDUALS, BY INDIVIDUAL AGE AND GENDER

Figure 4 presents the all individuals vaccinated by providers in Harris County, by the individual's age and gender. This analysis is not limited to residents of Harris County.



Of the individuals who have been vaccinated with at least one dose by a Harris County provider, 38% (108,674) of recipients are male; 58% (166,991) are female; and 5% (13,592) are recorded as unknown gender. Of the individuals vaccinated with at least one dose in Harris County;¹²

A total of 10% (28,557) are 80 years old or older. Of this population, 38% (10,814) are male; 57% (16,249) are female; and 5% (1,494) are recorded as gender unknown.

A total of 32% (91,285) are between the ages 65-79. Of this population, 41% (37,640) are male; 50% (45,854) are female; and 9% (7,791) are recorded as gender unknown.

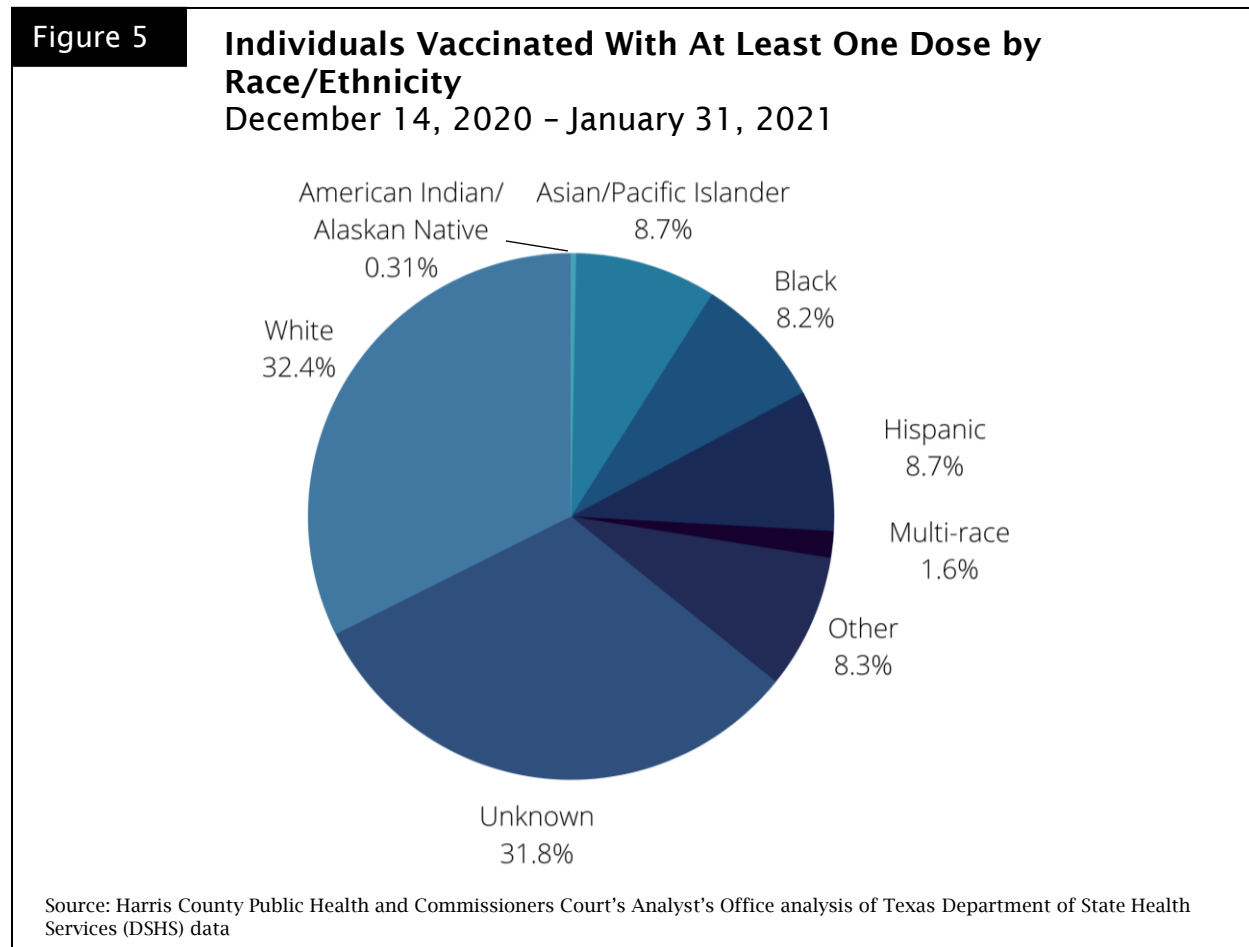
A total of 22% (63,570) are between the ages 50-64. Of this population, 37% (23,805) are male; 60% (37,984) are female; and 3% (1,781) are recorded as gender unknown.

A total of 36% (105,845) are between the ages 16-49. Of this population, 34% (36,415) are male; 63% (66,904) are female; and 2% (2,526) are recorded as gender unknown.

¹² Note: age and gender totals do not sum to vaccine doses administered totals due to data limitations.

HARRIS COUNTY VACCINATIONS BY RACE AND ETHNICITY

Figure 5 presents the race and ethnicity of individuals who received at least one vaccine dose from a provider in Harris County. This analysis is not limited to residents of Harris County.



Of the individuals in Harris County vaccinated with at least one dose:

- **0.31% (904) identify as American Indian or Alaskan Native;**
- **8.69% (25,365) identify as Asian or Pacific Islander;**
- **8.18% (23,889) identify as Black;**
- **8.7% (25,401) identify as Hispanic;**
- **8.28 (24,182) identify as Black;**
- **31.82% (92,885) are recorded as unknown race and ethnicity; and,**
- **32.38% (94,509) identify as White.**

Note: Prior to February 4, 2021, providers were not required to report race/ethnicity when reporting doses to Texas Department of State Health Services (DSHS) because vaccine recipients are allowed to decline disclosing their race/ethnicity to a provider.^{13,14}

¹³ Email communication with Texas Department of State Health Services (DSHS), February 2, 2021.

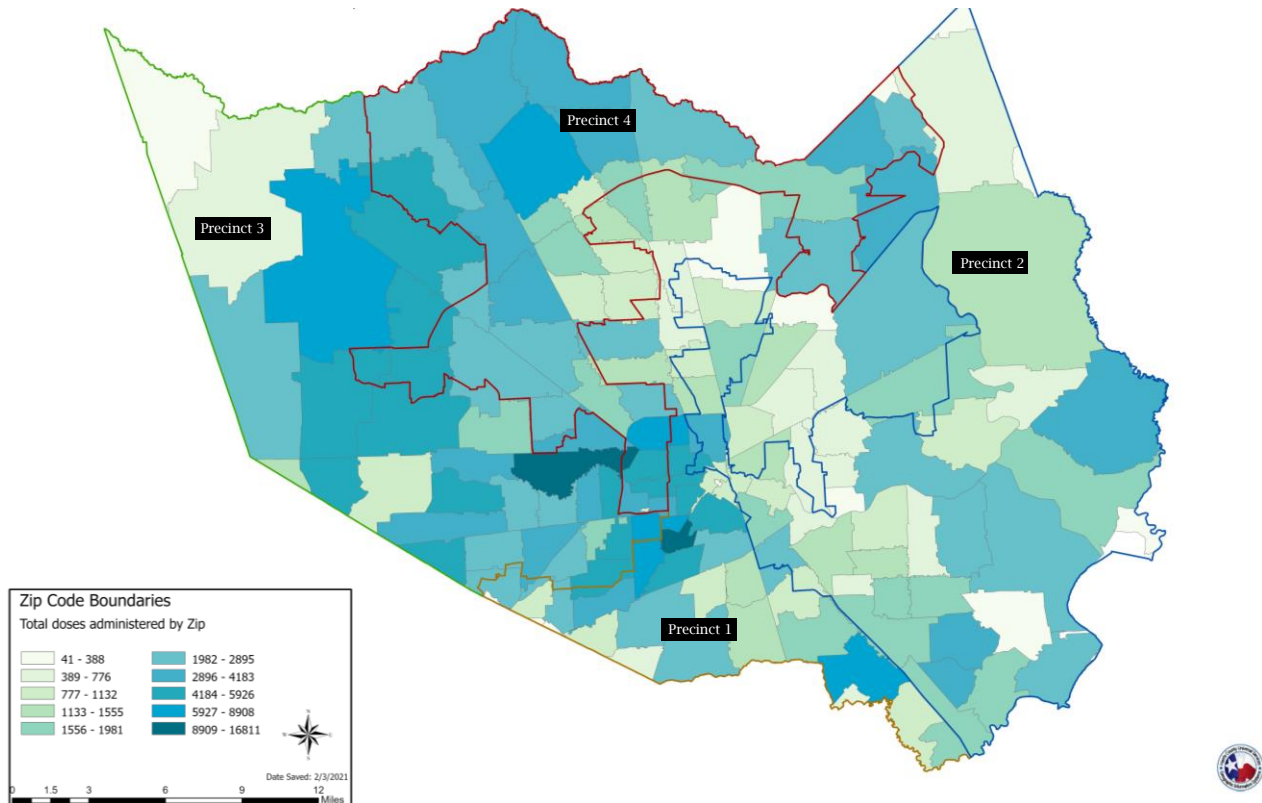
¹⁴ Effective February 4, 2021, providers are required to enter Race and Ethnicity fields in the ImmTrac2 User Interface.

HARRIS COUNTY VACCINE DOSES ADMINISTERED BY PRECINCT

Figure 6 presents vaccine doses administered to Harris County residents by resident's reported home zip code. The boundaries for Harris County's four Commissioner precincts have been overlaid on this map.

Figure 6

Harris County Vaccine Doses Administered by Individuals' Zip Code December 14, 2020 - January 31, 2021



Source: Universal Services analysis of Texas Department of State Health Services (DSHS) data

See the Appendix (Figures 9 and 10) for a full list of vaccine doses administered to Harris County residents by resident's reported home zip code.

HARRIS COUNTY VACCINES DOSES ADMINISTERED BY RESIDENT ZIP CODE AND MEDIAN INCOME

Figure 8 presents the median incomes and vaccine doses administered to Harris County residents. The figure shows the ten Harris County zip codes with the fewest number of vaccine doses administered to residents and the ten Harris County zip codes with greatest number of vaccine doses administered to residents.

Figure 8 Harris County COVID-19 Vaccines Doses Administered, December 14, 2020 – January 31, 2021, by Resident's Zip Code and Median Income		
Zip Codes With Fewest Number of Vaccines Doses Administered		
Zip Code	Doses Administered	Median Income
77010	104	\$240,417
77050	192	\$56,275
77032	300	\$30,855
77547	340	\$42,872
77046	416	\$81,803
77336	494	\$69,512
77078	529	\$37,356
77562	546	\$60,130
77037	566	\$42,906
77013	597	\$39,766
Zip Codes With Greatest Number of Vaccines Doses Administered		
Zip Code	Doses Administered	Median Income
77077	5,805	\$64,022
77429	5,926	\$65,922
77379	7,003	\$107,072
77025	7,258	\$102,008
77005	7,299	\$74,792
77433	7,719	\$189,500
77089	8,087	\$109,084
77008	8,908	\$68,204
77024*	13,146	\$104,167
77030*	16,811	\$116,920
Source: Analyst's Office analysis of Texas Department of State Health Services (DSHS) and American Community Survey (ACS) 2018 5-year estimates downloaded from Harris County's Applied Technologies Location Analysis and Statistics		

The median income of the ten Harris County zip codes with the fewest number of **vaccine doses administered to residents is \$49,591**. The median income of the ten Harris County zip codes with greatest number of vaccine doses administered to residents is **\$103,088**.

*Note: Significantly large numbers of residents who were administered a vaccine dose in zip codes 77024 and 77030 report living at the same address. HCPH suggests that this discrepancy may be caused by hospital staff entering the same address for employees to speed up the vaccination process.

APPENDIX

Figures 9 and 10 include a full list of vaccine doses administered to Harris County residents by resident's reported home zip code.

Figure 9 Total COVID-19 Vaccine Doses Administered Ordered by Doses Administered							
Zip Code	Doses Administered	Zip Code	Doses Administered	Zip Code	Doses Administered	Zip Code	Doses Administered
77507	41	77002	1,131	77015	2,200	77070	3,344
77010	104	77506	1,132	77080	2,228	77059	3,387
77050	192	77048	1,211	77042	2,345	77339	3,392
77032	300	77022	1,223	77065	2,347	77388	3,520
77547	340	77016	1,235	77536	2,406	77521	3,670
77046	416	77020	1,242	77345	2,424	77082	3,811
77336	494	77091	1,320	77377	2,438	77057	3,872
77078	529	77073	1,358	77088	2,450	77375	4,011
77562	546	77033	1,450	77099	2,480	77346	4,183
77037	566	77532	1,477	77041	2,485	77019	4,273
77013	597	77502	1,532	77045	2,500	77006	4,446
77587	603	77017	1,542	77044	2,528	77083	4,484
77503	634	77014	1,555	77074	2,532	77004	4,560
77447	645	77093	1,576	77373	2,552	77056	4,722
77012	674	77092	1,629	77021	2,557	77450	4,732
77028	763	77034	1,657	77040	2,573	77095	4,785
77060	763	77598	1,658	77071	2,588	77084	4,923
77029	776	77504	1,663	77047	2,673	77007	5,181
77011	820	77043	1,669	77018	2,691	77449	5,298
77039	846	77090	1,716	77396	2,702	77054	5,413
77068	846	77066	1,732	77072	2,833	77401	5,471
77026	888	77049	1,733	77493	2,854	77096	5,742
77038	918	77058	1,748	77063	2,895	77077	5,805
77051	961	77338	1,763	77064	2,996	77429	5,926
77061	965	77081	1,774	77062	3,008	77379	7,003
77067	991	77069	1,814	77009	3,015	77025	7,258
77003	1,023	77023	1,819	77389	3,020	77005	7,299
77076	1,025	77520	1,857	77036	3,096	77433	7,719
77031	1,033	77075	1,861	77079	3,153	77089	8,087
77085	1,062	77505	1,981	77055	3,192	77008	8,908
77530	1,081	77571	2,138	77027	3,227	77024	13,146
77094	1,090	77586	2,148	77098	3,267	77030	16,811
77086	1,105	77087	2,149	77035	3,318		

Figure 10

Total COVID-19 Vaccine Doses Administered Ordered by Individuals' Zip Code

Zip Code	Doses Administered	Zip Code	Doses Administered	Zip Code	Doses Administered	Zip Code	Doses Administered
77002	1,131	77035	3,318	77070	3,344	77346	4,183
77003	1,023	77036	3,096	77071	2,588	77373	2,552
77004	4,560	77037	566	77072	2,833	77375	4,011
77005	7,299	77038	918	77073	1,358	77377	2,438
77006	4,446	77039	846	77074	2,532	77379	7,003
77007	5,181	77040	2,573	77075	1,861	77388	3,520
77008	8,908	77041	2,485	77076	1,025	77389	3,020
77009	3,015	77042	2,345	77077	5,805	77396	2,702
77010	104	77043	1,669	77078	529	77401	5,471
77011	820	77044	2,528	77079	3,153	77429	5,926
77012	674	77045	2,500	77080	2,228	77433	7,719
77013	597	77046	416	77081	1,774	77447	645
77014	1,555	77047	2,673	77082	3,811	77449	5,298
77015	2,200	77048	1,211	77083	4,484	77450	4,732
77016	1,235	77049	1,733	77084	4,923	77493	2,854
77017	1,542	77050	192	77085	1,062	77502	1,532
77018	2,691	77051	961	77086	1,105	77503	634
77019	4,273	77054	5,413	77087	2,149	77504	1,663
77020	1,242	77055	3,192	77088	2,450	77505	1,981
77021	2,557	77056	4,722	77089	8,087	77506	1,132
77022	1,223	77057	3,872	77090	1,716	77507	41
77023	1,819	77058	1,748	77091	1,320	77520	1,857
77024	13,146	77059	3,387	77092	1,629	77521	3,670
77025	7,258	77060	763	77093	1,576	77530	1,081
77026	888	77061	965	77094	1,090	77532	1,477
77027	3,227	77062	3,008	77095	4,785	77536	2,406
77028	763	77063	2,895	77096	5,742	77547	340
77029	776	77064	2,996	77098	3,267	77562	546
77030	16,811	77065	2,347	77099	2,480	77571	2,138
77031	1,033	77066	1,732	77336	494	77586	2,148
77032	300	77067	991	77338	1,763	77587	603
77033	1,450	77068	846	77339	3,392	77598	1,658
77034	1,657	77069	1,814	77345	2,424		

Source: Texas Department of State Health Services (DSHS) data

The Harris County Commissioners Court's Analyst's Office provides the Harris County Commissioners Court members with objective, nonpartisan, and timely fiscal and policy analysis related to the efficiency and effectiveness of various County operations.

This memo was prepared by Amy Rose, Senior Analyst.

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